

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

## PCT

### NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Rule 71.1)

To:

BELFIN, Vladimír  
P.O. Box 117  
272 80 Kladno  
REPUBLIQUE TCHEQUE

Date of mailing  
(day/month/year)

10.03.2005

Applicant's or agent's file reference

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#### IMPORTANT NOTIFICATION

International application No.

PCT/CZ 03/00070

International filing date (day/month/year)

15.12.2003

Priority date (day/month/year)

17.12.2002

Applicant

SVOS s.r.o. et al.

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

#### 4. REMINDER

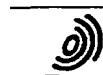
The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed inventions is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the international  
preliminary examining authority:



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# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT (PCT Article 36 and Rule 70)

Applicant's or agent's file reference ---	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/CZ 03/00070	International filing date ( <i>day/month/year</i> ) 15.12.2003	Priority date ( <i>day/month/year</i> ) 17.12.2002
International Patent Classification (IPC) or both national classification and IPC F41H5/04		
Applicant SVOS s.r.o. et al.		
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of 16 sheets.</p>		
<p>3. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> <li>I    <input checked="" type="checkbox"/> Basis of the opinion</li> <li>II   <input type="checkbox"/> Priority</li> <li>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</li> <li>IV   <input type="checkbox"/> Lack of unity of invention</li> <li>V    <input checked="" type="checkbox"/> Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</li> <li>VI   <input type="checkbox"/> Certain documents cited</li> <li>VII <input type="checkbox"/> Certain defects in the international application</li> <li>VIII <input type="checkbox"/> Certain observations on the international application</li> </ul>		
Date of submission of the demand  08.07.2004	Date of completion of this report  10.03.2005	
Name and mailing address of the international preliminary examining authority:  <div style="display: flex; align-items: center;"> <div>             European Patent Office              D-80298 Munich              Tel. +49 89 2399 - 0 Tx: 523656 epmu d              Fax: +49 89 2399 - 4465           </div> </div>	Authorized Officer  Ziegler, H-J  Telephone No. +49 89 2399-2894	



**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. **PCT/CZ 03/00070**

**I. Basis of the report**

1. With regard to the elements of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17))*):

**Description, Pages**

1-13 filed with the demand

**Claims, Numbers**

1-16 filed with the demand

**Drawings, Sheets**

1/1 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. **PCT/CZ 03/00070**

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	2-6
	No: Claims	1
Inventive step (IS)	Yes: Claims	2-4
	No: Claims	5,6
Industrial applicability (IA)	Yes: Claims	1-6
	No: Claims	

2. Citations and explanations

**see separate sheet**

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

Reference is made to the following documents:

D1: DE 43 44 711 A (DAIMLER BENZ AG) 20 July 1995 (1995-07-20)

D2: EP-A-0 247 020 (VOEST ALPINE AG) 25 November 1987 (1987-11-25)

**Novelty**

The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 is not new in the sense of Article 33(2) PCT.

The features referring to the techniques for bonding the layers and to the chemical composition of the intermediate layers in claim 1 are optional and do not delimit the subject matter the claim. The content of nickel mentioned in the claim is in combination with the term "in particular" which is in view of the PCT Guidelines 5.40 entirely optional. The same applies to the enumeration of bonding techniques in the claim.

The document D1 (fig.1) discloses a multi layered steel armour (col.3, l.19), consisting of a front-face ballistic resistant armour layer, and a backing armour layer (outer layers), which are fully metallurgically bonded by means of a joining metallic intermediate layer (inner layer; bonding by explosive cladding - col.2, l.57/58). This layer is made from a material featuring the face centred cubic crystalline lattice (col.1, l.2, l.61).

Claim 1 does encompass an armour where all the layers are made from the same material, since no concrete structural details or details regarding their composition are given in the claim.

Therefore all the technical features of claim 1 are known from D1.

Also D2 discloses the features of claim 1: Between two steel armour plates ("zwischen Grundwerkstoff und Auflage" col.2, l.46) is sandwiched an intermediate layer ("Zwischenlage aus Reinnickel oder Reineisen" l.47). The structure is fully metallurgically bonded ("Walzplattieren" col.2, l.51). Nickel has a face-centred cubic crystalline structure.

Inventive step of dependent claims

The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 5 and 6 does not involve an inventive step in the sense of Article 33(3) PCT.

Stacked, multiple layer armours are generally known in the field. A skilled person would adopt this suggestion in order to increase the protection offered by the armour. Thereby an arrangement as defined in claim 5 would be obviously created.

The armour of claim 6 uses an internal armour layer of steel that appears to have a composition that lies in an area, a skilled person would consider in making an armour, without exercising any inventive skills.

Therefore the subject matter of claims 5 and 6 is not regarded as involving an inventive step.

The compositions mentioned in claims 2-4 are not disclosed in the prior art at hand. There is no suggestion for skilled person to include these compositions in an intermediate armour layer for increasing the resistivity of the armour by introducing a highly plastic material having a maximum nickel content of 98% (claim 2), 50% (claim 3) or 30% (claim 4).

The invention is industrially applicable.